Amendments to the Claims

This listing of the Claims will replace all prior versions and listings of the claims in this patent application.

Listing of the Claims

1. (previously presented) A method of forming dual damascene openings in the fabrication of an integrated circuit device comprising:

providing metal lines covered by an insulating layer overlying a semiconductor substrate;

depositing an organic dielectric layer overlying said insulating layer;

depositing an inorganic dielectric layer overlying said organic dielectric layer wherein no etch stop layer is formed between said organic dielectric layer and said inorganic dielectric layer;

etching a via pattern into said inorganic dielectric layer;

etching said via pattern into said organic dielectric layer using patterned said inorganic dielectric layer as a mask; and

thereafter etching a trench pattern into said inorganic dielectric layer wherein said organic dielectric layer acts as an etch stop to complete said forming of said dual damascene openings in the fabrication of said integrated circuit device.

2. (original) The method according to Claim 1 further comprising forming semiconductor device structures including gate electrodes and source and drain regions in and on said semiconductor substrate wherein said metal lines overlie and contact said semiconductor

device structures.

3. (currently amended) The method according to Claim1 wherein said organic dielectric layer comprises polyimides, <u>hydrido organo siloxane polymer (HOSP)</u>, <u>polyphenylene polymers (SILK)</u>, <u>poly(arylene) ethers (FLARE)</u>, benzocyclobutene (BCB), methylsilsesquioxane (MSQ), or organic polymers.

4. (currently amended) The method according to Claim 1 wherein said inorganic dielectric layer comprises <u>carbon-doped oxides (CORAL)</u>, <u>silicon oxide-based low-k films (BLACK DIAMOND)</u>, fluorinated silicate glass (FSG), carbon-doped FSG, nitrogen-doped FSG, <u>trimethylsilane (Z3MS)</u>, <u>hydrogen silsesquioxane based materials (XLK)</u>, or hydrogen silsesquioxane (HSQ).

5. (original) The method according to Claim 1 further comprising filling said dual damascene openings with a metal layer.

6. (previously presented) A method of forming dual damascene openings in the fabrication of an integrated circuit device comprising:

    providing metal lines covered by an insulating layer overlying a semiconductor substrate;

    depositing an organic dielectric layer overlying said insulating layer;

    depositing an inorganic dielectric layer overlying said organic dielectric layer wherein no etch stop layer is formed between said organic dielectric layer and said inorganic dielectric layer;

etching a trench pattern into said inorganic dielectric layer; and

thereafter etching a via pattern into said organic dielectric layer through said trench pattern

to complete said forming of said dual damascene openings in the fabrication of said

integrated circuit device.

7. (original) The method according to Claim 6 further comprising forming semiconductor

device structures including gate electrodes and source and drain regions in and on said

semiconductor substrate wherein said metal lines overlie and contact said semiconductor

device structures.

8. (currently amended) The method according to Claim 6 wherein said organic dielectric layer

comprises polyimides, hydrido organo siloxane polymer (HOSP), polyphenylene polymers

(SILK), poly(arylene) ethers (FLARE), benzocyclobutene (BCB), methylsilsesquioxane

(MSQ), or organic polymers.

9. (currently amended) The method according to Claim 6 wherein said inorganic dielectric

layer comprises carbon-doped oxides (CORAL), silicon oxide-based low-k films (BLACK

DIAMOND), fluorinated silicate glass (FSG), carbon-doped FSG, nitrogen-doped FSG,

trimethylsilane (Z3MS), hydrogen silsesquioxane based materials (XLK), or hydrogen

silsesquioxane (HSQ).

10. (original) The method according to Claim 6 further comprising filling said dual

damascene openings with a metal layer.

11-30. (canceled)